Leitrim County Development Plan 2023-2029

Strategic Flood Risk Assessment

Comhairle Chontae Liatroma | Leitrim County Council

STRATEGIC FLOOD RISK ASSESSMENT

FOR THE

LEITRIM COUNTY DEVELOPMENT PLAN 2023-2029

for: **Leitrim County Council**

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Table of Contents

Section 1 Introduction and Policy Background

1.1 Introduction and Terms of Reference

Leitrim County Council has adopted the Leitrim County Development Plan 2023-2029 hereafter referred to as the "Plan".

The preparation of the Plan has undergone an appropriate level of Strategic Flood Risk Assessment (SFRA) in accordance with *The Planning System and Flood Risk Management - Guidelines for Planning Authorities* (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009) and Department of the Environment, Community and Local Government Circular PL 2/2014. The SFRA provides an assessment of flood risk and includes mapped boundaries for Flood Risk Zones.

The SFRA was undertaken alongside the Plan-preparation process and was updated to take into account of recommendations contained in submissions.

1.2 Summary of Conclusion and Recommendations

The purpose of this document is to detail the findings of the SFRA that has been undertaken alongside the preparation of the Plan.

The SFRA has informed the Plan and enabled compliance with the Flood Risk Management Guidelines. All SFRA recommendations – including those related to land use zoning and flood risk management provisions – have been integrated into the Plan.

1.3 Flood Risk and its Relevance as an Issue to the Plan

1.3.1 Flood Risk

Flooding is an environmental phenomenon and can pose a risk to human health as well as causing economic and social effects. Some of the effects of flooding are identified on Table 1 below.

Certain lands within the County have the potential to be vulnerable to flooding and this vulnerability could be exacerbated by changes in both the occurrence of severe rainfall events and associated flooding. Local conditions such as low-lying lands and slow surface water drainage can increase the risk of flooding.

Table 1 Potential effects that may occur as a result of flooding

Tangible Effects	Intangible Human and Other Effects
Damage to buildings (houses)	Loss of life
Damage to contents of buildings	Physical injury
Damage to new infrastructure e.g. roads	Increased stress
Loss of income	Physical and psychological trauma
Disruption of flow of employees to work causing knock on effects	Increase in flood related suicide
Enhanced rate of property deterioration and decay	Increase in ill health
Long term rot and damp	Homelessness
	Loss of uninsured possessions

1.4 Flood Risk Management Policy

1.4.1 EU Floods Directive

The European Directive 2007/60/EC on the assessment and management of flood risk aims to reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activity. The Directive applies to inland waters as well as all coastal waters across the whole territory of the EU. The Directive requires Member States to:

- Carry out a preliminary assessment by 2011 in order to identify the river basins and associated coastal areas where potential significant flood risk exists (preliminary mapping was prepared and a list of Areas for Further Assessment finalised in 2012).
- Prepare flood extent maps for the identified areas (finalised in 2016 for inclusion in Flood Risk Management Plans – see below).
- Prepare flood risk management plans focused on prevention, protection and preparedness. These plans are to include measures to reduce the probability of flooding and its potential consequences. These Plans were adopted in 2018.

Implementation of the EU Floods Directive is required to be coordinated with the requirements of the EU Water Framework Directive and the current National River Basin Management Plan.

1.4.2 National Flood Policy

Historically, flood risk management focused on land drainage for the benefit of agricultural improvement. With increasing urbanisation, the Arterial Drainage Act, 1945, was amended in 1995 to permit the Office of Public Works (OPW) to implement localised flood relief schemes to provide flood protection for cities, towns and villages.

In line with changing national and international paradigms on how to manage flood risk most effectively and efficiently, a review of national flood policy was undertaken in 2003-2004. The review was undertaken by an Inter-Departmental Review Group, led by the Minister of State at the Department of Finance with special responsibility for the OPW. The Review Group prepared a report that was put to Government, and subsequently approved and published in September 2004 (Report of the Flood Policy Review Group, OPW, 2004).

The scope of the review included a review of the roles and responsibilities of the different bodies with responsibilities for managing flood risk, and to set a new policy for flood risk management in Ireland into the future. The adopted policy was accompanied by many specific recommendations, including:

- Focus on managing flood risk, rather than relying solely on flood protection measures aimed at reducing flooding;
- Taking a catchment-based approach to assess and manage risks within the whole-catchment context; and
- Being proactive in assessing and managing flood risks, including the preparation of flood maps and flood risk management plans.

1.4.3 National CFRAM Programme

The national Catchment Flood Risk Assessment and Management (CFRAM) programme commenced in Ireland in 2011. The CFRAM Programme delivers on core components of the National Flood Policy, adopted in 2004, and on the requirements of the EU Floods Directive. The Programme has been implemented through CFRAM studies that have been undertaken for each of the river basin districts in Ireland.

The CFRAM Programme comprises three phases as follows:

- The Preliminary Flood Risk Assessment[1] (PFRA) mapping exercise, which was completed in 2012;
- The CFRAM Studies and parallel activities, with Flood Risk Management Plans finalised in 2018; and
- Implementation and Review.

The Programme provides for three main consultative stages as follows:

- Consultation for the PFRA mapping that was adopted in 2012;
- Consultation for Flood Extent mapping, that was finalised in 2016 for inclusion in Flood Risk Management Plans; and
- Consultation for Flood Risk Management Plans, that were adopted in 2018.

The OPW is the lead agency for flood risk management in Ireland. The coordination and implementation of Government policy on the management of flood risk in Ireland is part of its responsibility. The European Communities (Assessment and Management of Flood Risks) Regulations 2010 (S.I. No. 122) identifies the Commissioners of Public Works as the 'competent authority' with overall responsibility for implementation of the Floods Directive 2007/60/EC.

1.4.4 Flood Risk Management Guidelines

1.4.4.1 Introduction

In 2009, the OPW and the then Department of the Environment and Local Government (DEHLG) published Guidelines on flood risk management for planning authorities entitled *The Planning System and Flood Risk Management - Guidelines for Planning Authorities*. The Guidelines introduce mechanisms for the incorporation of flood risk identification, assessment and management into the planning process. Implementation of the Guidelines is intended to be achieved through actions at the national, regional, local authority and site-specific levels. Planning authorities and An Bord Pleanála are required to have regard to the Guidelines in carrying out their functions under the Planning Acts.

The core objectives of the Guidelines are to:

- Avoid inappropriate development in areas at risk of flooding;
- Avoid new developments increasing flood risk elsewhere, including that which may arise from surface water run-off;
- Ensure effective management of residual risks for development permitted in floodplains;
- Avoid unnecessary restriction of national, regional or local economic and social growth;
- Improve the understanding of flood risk among relevant stakeholders; and
- Ensure that the requirements of EU and national law in relation to the natural environment and nature conservation are complied with at all stages of flood risk management.

1.4.4.2 Principles of Flood Risk Management

The key principles of flood risk management set out in the flood Guidelines are to:

- Avoid development that will be at risk of flooding or that will increase the flooding risk elsewhere, where possible;
- Substitute less vulnerable uses, where avoidance is not possible; and
- Mitigate and manage the risk, where avoidance and substitution are not possible.

The Guidelines follow the principle that development should not be permitted in flood risk areas, particularly floodplains, except where there are no alternative and appropriate sites available in lower risk areas that are consistent with the objectives of proper planning and sustainable development.

[1] The PFRA identified the settlements/areas that are most at risk from significant flooding and mapped the areas of risk. Where the flood risk is of particular concern nationally, these settlements/areas are identified as Areas for Further Assessment (AFAs). AFAs in County Leitrim comprise Tullaghan, Manorhamilton, Drumshanbo, Leitrim Village, Carrick on Shannon (including Cortober), Mohill, Dromod and Ballinamore.

Development in areas that have the highest flood risk should be avoided and/or only considered in exceptional circumstances (through a prescribed *Justification Test*) if adequate land or sites are not available in areas that have lower flood risk. Most types of development would be considered inappropriate in areas that have the highest flood risk. Only water-compatible development such as docks and marinas, dockside activities that require a waterside location, amenity open space, outdoor sports and recreation and essential transport infrastructure that cannot be located elsewhere would be considered appropriate in these areas.

1.4.4.3 Stages of SFRA

The Flood Risk Management Guidelines recommend a staged approach to flood risk assessment that covers both the likelihood of flooding and the potential consequences. The stages of appraisal and assessment are:

> **Stage 1 Flood risk identification** – to identify whether there may be any flooding or surface water management issues related to either the area of Regional Spatial and Economic Strategies, Development Plans and LAP's or a proposed development site that may warrant further investigation at the appropriate lower-level plan or planning application levels.
>
> **Stage 2 Initial flood risk assessment** – to confirm sources of flooding that may affect a Plan area or proposed development site, to appraise the adequacy of existing information and to scope the extent of the risk of flooding which may involve preparing flood zone maps. Where hydraulic models exist the potential impact of a development on flooding elsewhere and of the scope of possible mitigation measures can be assessed. In addition, the requirements of the detailed assessment are scoped.
>
> **Stage 3 Detailed flood risk assessment** – to assess flood risk issues in sufficient detail and to provide a quantitative appraisal of potential flood risk to a proposed or existing development or land to be zoned, of its potential impact on flood risk elsewhere and of the effectiveness of any proposed mitigation measures.

1.4.4.4 Flood Zones

Flood risk is an expression of the combination of the flood probability or likelihood and the magnitude of the potential consequences of the flood event. It is normally expressed in terms of the following relationship:

Flood risk = Likelihood of flooding x Consequences of flooding

Likelihood of flooding is normally defined as the percentage probability of a flood of a given magnitude or severity occurring or being exceeded in any given year. For example, a 1% Annual Exceedance Probability (AEP) indicates the severity of a flood that is expected to be exceeded on average once in 100 years, i.e. it has a 1 in 100 (1%) chance of occurring in any one year.

Consequences of flooding depend on the hazards associated with the flooding (e.g. depth of water, speed of flow, rate of onset, duration, wave-action effects, water quality) and the vulnerability of people, property and the environment potentially affected by a flood (e.g. the age profile of the population, the type of development and the presence and reliability of mitigation measures).

Flood zones are geographical areas within which the likelihood of flooding is in a particular range and they are a key tool in flood risk management within the planning process as well as in flood warning and emergency planning.

There are three types of flood zones defined for the purposes of the Flood Guidelines:

- **Flood Zone A** – where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding);
- **Flood Zone B** – where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% or 1 in 1000 year and 0.5% or 1 in 200 for coastal flooding); and

- **Flood Zone C** – where the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 1000 for both river and coastal flooding). Flood Zone C covers all other areas that are not in zones A or B.

A summary of the requirements of the Flood Guidelines for land uses across each of the above flood zones is provided at **Appendix I**.

1.5 Emerging Information and Disclaimer

It is important to note that compliance with the requirements of the Flood Risk Management Guidelines is currently based on emerging and best available data at the time of preparing the assessment, including Flood Risk Management Plans, which will be updated on a cyclical basis as part of CFRAM activities.

Following adoption of the Plan, information in relation to flood risk may be altered in light of future data and analysis, by, for example, the OPW, or future flood events. As a result, all landowners and developers are advised that Leitrim County Council and their agents can accept no responsibility for losses or damages arising due to assessments of the vulnerability to flooding of lands, uses and developments. Owners, users and developers are advised to take all reasonable measures to assess the vulnerability to flooding of lands and buildings (including basements) in which they have an interest prior to making planning or development decisions. Any future SFRAs for the area will integrate other new and emerging data.

1.6 Content of the Plan

The Plan provides for the proper planning and sustainable development of County Leitrim over the period 2023-2029. It consists of a number of volumes with Volume 1 providing a written statement and maps over 13 chapters as follow:

- Chapter 1: Introduction
- Chapter 2: Core Strategy
- Chapter 3: Housing Strategy
- Chapter 4: Economic Development (including Retail)
- Chapter 5: Tourism
- Chapter 6: Urban Settlements
- Chapter 7: Sustainable Communities
- Chapter 8: Transport
- Chapter 9: Infrastructure and Energy
- Chapter 10: Rural Development
- Chapter 11: Heritage
- Chapter 12: Climate Action and Renewable Energy
- Chapter 13: Development Management Standards

Appendix I of the Written Statement contains a Statement prepared in accordance with Section 28 (1A) of the Planning and Development Act 2000 (as amended) demonstrating how the Planning Authority in preparing the Development Plan has implemented the policies and objectives set out in Ministerial Guidelines issued under Section 28 of the Act.

Volume II contains Settlement Plans for towns and villages. Volume III comprises the Book of Maps for both Volume I (Written Statement) and for Volume II (Settlement Plans). Volume III contains the proposed Record of Protected Structures. The Plan also includes a range of supporting documents and strategies, including this SFRA.

Section 2 Stage 1 SFRA - Flood Risk Identification

2.1 Introduction

Stage 1 SFRA (flood risk identification) was undertaken in order to identify whether there may be any flooding or surface water management issues within or adjacent to zoned lands and consequently whether Stage 2 SFRA (flood risk assessment) should be proceeded to.

Different areas of County Leitrim are subject to different Flood Risk Management Plans:

- Flood Risk Management Plan for the Sligo Bay & Drowse River Basin (UOM35)
- Flood Risk Management Plan for the Shannon Upper & Lower River Basin (UOM25-26)
- Flood Risk Management Plan for the Erne River Basin (UOM36)

Stage 1 SFRA is based on existing information on flood risk indicators based on historical evidence and computational models. **Appendix II** (pages 1-6) show the spatial distribution of County-wide historical and predictive flood risk indicators.

Appendix II also provides maps of these historical and predictive indicators for the following settlements that are provided with land use zoning by the Plan: Ballinaglera; Ballinamore; Carrigallen; Cloone; Dowra; Dromahair; Dromod; Drumcong; Drumkeeran; Drumshanbo; Drumsna; Fenagh; Glenfarne; Jamestown; Keshcarrigan; Kilclare; Killarga; Kiltyclogher; Kinlough; Leitrim; Lurganboy; Manorhamilton; Mohill; Newtowngore; Roosky; Rossinver; and Tullaghan.

2.2 Drainage, Defences and Early Warning Systems

With regard to areas benefitting from drainage and defences (flood relief scheme works), there are various measures that have been implemented in County Leitrim that will contribute towards flood risk management. These include the culverting of various streams and rivers in many urban areas.

Embankments, channels and associated predicted benefitting lands under a number of historical government schemes are mapped in **Appendix II**. Arterial Drainage Schemes were carried out by the Office of Public Works under the Arterial Drainage Act 1945 to improve land for agricultural purposes and to mitigate flooding. Arterial drainage maintenance and monitoring of these schemes is still carried out by OPW on rivers, lakes, weirs, bridges and embankments to maintain adequate conveyance and ensure that flood waters (of varying magnitude) are retained in bank by lowering water levels during the growing season thus reducing waterlogging on the adjacent land during wetter periods. **Appendix II** includes mapping for the various arterial drainage maintenance schemes in Leitrim (including Bonet, Duff and Kilcoo) which benefit various settlements and/or their surrounding areas.

Drainage Districts were carried out by the Commissioners of Public Works under a number of drainage and navigation acts from 1842 to the 1930s to improve land for agriculture and to mitigate flooding. Channels and lakes were deepened and widened, weirs removed, embankments constructed, bridges replaced or modified and various other work was carried out. The purpose of the schemes was to improve land for agriculture, by lowering water levels during the growing season to reduce waterlogging on the land beside watercourses known as callows. Local authorities are charged with responsibility to maintain Drainage Districts. **Appendix II** includes mapping for the various Drainage Districts in Leitrim (including Ballyconnell DD Leitrim, Eslin DD, Lough Oughter Gowna & River Erne DD and Rinn & Black DD) which benefit various settlements and/or their surrounding areas.
The 2018 Flood Risk Management Plans identify various general measures under “Measures Applicable for all Areas”[2].

[2] Including under the headings of: Prevention - Sustainable Planning and Development Management; Prevention - Sustainable Urban Drainage Systems (SUDS); Prevention - Adaptation Planning; Prevention - Land Use Management and Natural Flood Risk Management; Protection - Maintenance of Channels not part of a Scheme; Preparedness - Flood Forecasting and Warning; Preparedness - Emergency Response Planning;

Catchment-wide measures for each of the Flood Risk Management Plan areas are shown on Table 2.

Table 2 Catchment Wide Measures for Individual Settlements

Flood Risk Management Plan	Measures
Flood Risk Management Plan for the Sligo Bay & Drowse River Basin (UOM35)	Existing Measure: Maintenance of Arterial Drainage Schemes Outline: The OPW has a statutory duty under the Arterial Drainage Act, 1945, and the Amendment of the Act, 1995, to maintain the Arterial Drainage and Flood Relief Schemes constructed by it under those Acts. Existing Measure: Maintenance of Drainage Districts Outline: The statutory duty of maintenance for 4,600 km of river channel benefiting from Drainage District Schemes rests with the relevant Local Authorities. Proposed Measure: Development of a Flood Forecasting System Outline: The development of a coastal flood forecasting system for Sligo Bay & Drowes - To progress as part of the development of the National Flood Forecasting Service
Shannon Upper and Lower River Basin (UOM25-26)	Existing Measure: Maintenance of Arterial Drainage Schemes Outline: The OPW has a statutory duty under the Arterial Drainage Act, 1945, and the Amendment of the Act, 1995, to maintain the Arterial Drainage and Flood Relief Schemes constructed by it under those Acts. Existing Measure: Maintenance of Drainage Districts Outline: The statutory duty of maintenance for 4,600 km of river channel benefiting from Drainage District Schemes rests with the relevant Local Authorities. Proposed Measure: Improve Long-Range Forecasting on the river Shannon to Optimise Operation of Water Level Management Infratructure Outline: The introduction of a long range flood forecasting system to allow, within current water level requirements, the optimisation of the sluices at Athlone weir and storage within Lough Ree in advance of forecasted Summer flood events Proposed Measure: Coordination of water level management on the River Shannon Outline: Currently there are three agencies with a statutory interest in the water levels along the River Shannon; namely the OPW, ESB and Waterways Ireland (WI). A background to these agencies and their statutory responsibilities for the River Shannon is provided in the River Shannon Level Operation Review, which is available to download at www.opw.ie/FloodPlans. The water levels on the three lakes (Lough Allen, Lough Ree and Lough Derg) are controlled and managed by the ESB. The levels of Lough Derg are managed for the purpose of electricity generation. Levels in Lough Allen and Lough Ree are managed to ensure minimum navigation levels in the river during dry periods and to reduce the impacts of floods as far as reasonably possible. The levels of the navigation channel in between the lakes are managed by Waterways Ireland. The management of water levels for the purpose of reducing flood risk must take into account the existing statutory minimum operating levels, the potential impacts on the environment, water supply and waterway infrastructure (both private and public) and the avoidance of causing downstream flooding. The

Preparedness - Promotion of Individual and Community Resilience; Preparedness - Individual Property Protection; Preparedness - Flood-Related Data Collection; Prevention - Voluntary Home Relocation

Flood Risk Management Plan	Measures
	OPW, ESB and WI are working together, through the Shannon Flood Risk State Agency Co-ordination Working Group to build on the existing co-ordination of water level management activities and to trial the lowering of the lake levels in Lough Allen to help mitigate potential flood risk during Winter months.
Flood Risk Management Plan for the Erne River Basin (UOM36)	Existing Measure: Maintenance of Arterial Drainage Schemes Outline: The OPW has a statutory duty under the Arterial Drainage Act, 1945, and the Amendment of the Act, 1995, to maintain the Arterial Drainage and Flood Relief Schemes constructed by it under those Acts. Existing Measure: Maintenance of Drainage Districts Outline: The statutory duty of maintenance for 4,600 km of river channel benefiting from Drainage District Schemes rests with the relevant Local Authorities.

Measures for individual settlements are shown on Table 3.

Table 3 Measures for Individual Settlements designated as Areas for Further Assessment[3]

Settlement	Flood Risk Management Plan	Measures
Tullaghan	Flood Risk Management Plan for the Sligo Bay & Drowse River Basin (UOM35)	No Proposed Measure: No structural Flood Relief Scheme is proposed at this time for Tullaghan Outline: There is a relatively low level of flood risk to this community from rivers and/or the sea, and no structural flood relief measures are therefore proposed at this time. The current level of risk will be reviewed, along with all areas, on a regular basis into the future
Manorhamilton	Flood Risk Management Plan for the Sligo Bay & Drowse River Basin (UOM35)	No Proposed Measure: No structural Flood Relief Scheme is proposed at this time for Manorhamilton Outline: There is a relatively low level of flood risk to this community from rivers and no structural flood relief measures are therefore proposed at this time. The current level of risk will be reviewed, along with all areas, on a regular basis into the future
Drumshanbo	Shannon Upper and Lower River Basin (UOM25-26)	No Proposed Measure: No structural Flood Relief Scheme is proposed at this time for Drumshanbo Outline: There is a relatively low level of flood risk to this community from rivers and/or the sea, and no structural flood relief measures are therefore proposed at this time. The current level of risk will be reviewed, along with all areas, on a regular basis into the future

[3] The OPW's Preliminary
Flood Risk Assessment identified the settlements/areas that are most at risk from significant flooding and mapped the areas of risk. Where the flood risk is of particular concern nationally, these settlements/areas are identified as Areas for Further Assessment.

Settlement	Flood Risk Management Plan	Measures
Leitrim Village	Shannon Upper and Lower River Basin (UOM25-26)	Proposed Measure: Progress the development of a Flood Relief Scheme for Leitrim Village Outline: Progress the project-level development and assessment of a Flood Relief Scheme for Leitrim Village, including environmental assessment as necessary and further public consultation, for refinement and preparation for planning / exhibition and, if and as appropriate, implementation. The proposed measure for Leitrim Village that may be implemented after project-level assessment and planning or Exhibition and confirmation might include; • Construction of 142m of new flood defence wall and a 498m new embankment, and a flood gate. • Construction of a flapped outfall unit for the watercourse that passes through the embankment to prevent reverse flow from the River Shannon. • Installation of a simple flood forecasting unit, including a new hydrometric gauge with water level monitoring and telemetry to send warning messages when water level reaches a specified trigger point. • Maintain existing arterial drainage scheme.
Carrick on Shannon (including Cortober)	Shannon Upper and Lower River Basin (UOM25-26)	Measure Underway: Progress a Flood Relief Scheme for Carrick on Shannon Status: Stage I: Scheme Development and Preliminary Design Outline: The proposed Carrick on Shannon Flood Relief Scheme may include; construction of new flood defence walls, new embankments and a 2m floodgate. Rising the road level. Installation of a simple flood forecasting unit, including an addition of telemetry to an existing hydrometric gauge to send warning messages when water level reaches a specified trigger point. The proposed scheme is expected to provide protection against the 100-year flood (1% Annual Exceedance Probability)
Mohill	Shannon Upper and Lower River Basin (UOM25-26)	Proposed Measure: Progress the development of a Flood Relief Scheme for Mohill Outline: Progress the project-level development and assessment of a Flood Relief Scheme for Mohill, including environmental assessment as necessary and further public consultation, for refinement and preparation for planning / exhibition and, if and as appropriate, implementation. The proposed measure for Mohill that may be implemented after project-level assessment and planning or Exhibition and confirmation might include: • Construction of 69m of new flood defence walls; • Public awareness.

Settlement	Flood Risk Management Plan	Measures
Dromod	Shannon Upper and Lower River Basin (UOM25-26)	Proposed Measure: Progress the development of a Flood Relief Scheme for Dromod Outline: Progress the project-level development and assessment of a Flood Relief Scheme for Dromod, including environmental assessment as necessary and further public consultation, for refinement and preparation for planning / exhibition and, if and as appropriate, implementation. The proposed measure for Dromod that may be implemented after project-level assessment and planning or Exhibition and confirmation might include; • Construction of 368m of new flood defence walls, 263m of new embankments, and a 13m flood gate to defend properties. • Flood forecasting. • Promotion of Individual and Community Resilience.
Ballinamore	Flood Risk Management Plan for the Erne River Basin (UOM36)	Ballinamore is designated as Areas for Further Assessment and therefore has been included on this table, however; no additional measures are proposed. Existing Measures are detailed on Table 2.

The provision of flood protection measures can significantly reduce flood risk. However, the Ministerial Guidelines require that the presence of flood protection structures should be ignored in determining flood zones. This is because of risks relating to failure and severe flood events that exceed design capacity (the risk of severe events is exacerbated with climate change). Notwithstanding this, new development can proceed in areas that are at elevated levels of flood risk subject to the Justification Test provided for by the Guidelines being passed, which takes into account proposals to manage flood risk, such as the development of defences. Although insurance can be challenging to attain in these instances.

Various rivers and their banks and culverts in the County are maintained by the Office of Public Works and Leitrim County Council.

Met Éireann currently issues flood warnings for County Leitrim. Met Éireann, in collaboration with the OPW, is currently engaged in the establishment of a National Flood Forecasting and Warnings Service to forecast for fluvial and coastal flood events.

2.3 Other Flood Studies

Other Flood Studies considered in the preparation of this assessment include:

- Flood Risk Management Plan for the Sligo Bay & Drowse River Basin (UOM35)
- Shannon Upper and Lower River Basin (UOM25-26)
- Flood Risk Management Plan for the Erne River Basin (UOM36)
- Previous SFRAs in County Leitrim; and
- Regional Flood Risk Assessment for the Northern and Western Region, 2020.

2.4 Flood Risk Indicators

Indicators of flood risk that are based on historical flooding events are identified and described on Table 4 and mapped at county and settlement level in **Appendix II**. Indicators of flood risk that are based on computational models – predictive flood risk indicators – are identified and described on Table 5 and mapped at county and settlement level in **Appendix II**.

The SFRA GIS layers, including those relating to predictive indicators and Future Scenario mapping, will be made available for use in assessing individual planning applications as part of the Council's development management functions.

Table 4 Historical Flood Risk Indicators

Information Source	Description	Strategic Limitations
Recorded Flood Events from the OPW	A flood event is the occurrence of recorded flooding at a given location on a given date. The flood event is derived from different types of information (reports, photographs etc.).	This dataset only provides a spot location
Recurring Flood Events	A flood event that has occurred more than once at a certain area is named a recurring flood event.	This dataset only provides a spot location
OPW Flood Extent	A flood extent is an inundated area as recorded at a certain moment in time. This layer of information includes floods recorded in 1999/2000 and 1954.	Coverage limited
Alluvium Soils	Mineral alluvial soil mapping is indicative of recurrent or significant fluvial flooding at some point in the past and was generated by Teagasc with co-operation of the Forest Service, EPA and GSI. This project was completed in May 2006.	Drainage may have changed significantly since these soils were deposited.
Benefitting lands (OPW)	Benefitting lands mapping is a dataset identifying land that might benefit from the implementation of Arterial (Major) Drainage Schemes (under the Arterial Drainage Act 1945) and indicating areas of land estimated or reported to be subject to flooding or poor drainage.	Identifies broad areas - low resolution for flood risk management
Drainage Districts (OPW)	This drainage scheme mapping dataset was prepared on behalf of the Drainage Districts (Local Authorities with statutory responsibility for maintenance under the Arterial Drainage Act, 1925). These maps identify land that might benefit from the implementation of Arterial (Major) Drainage Schemes and indicate areas of land subject to flooding or poor drainage.	Identifies large broad areas - very low resolution for flood risk management
Land Commission (OPW)	This dataset indicates areas of land defended to some degree against flooding that were formerly the responsibility of the Land Commission.	Identifies broad areas - low resolution for flood risk management
GSI Groundwater Historical Data	The historic groundwater flood map is a national-scale flood map presenting the maximum historic observed extent of karst groundwater flooding. The map is primarily based on the winter 2015/2016 flood event, which in most areas represented the largest groundwater flood event on record. The map was produced based on the SAR imagery of the 2015/2016 event as well as any available supplementary evidence. The floods were classified by flood type differentiating between floods dominated by groundwater (GW) and floods with	The predictive groundwater flood map do not include all turloughs.

Information Source	Description	Strategic Limitations
	significant contribution of groundwater and surface water (GWSW). In addition to the historic groundwater flood map, the flood mapping methodology was also adapted to produce a surface water flood map of the 2015/2016 flood event. This flood map encompasses fluvial and pluvial flooding in non-urban areas and has been developed as a separate product.	

Table 5 Predictive Flood Risk Indicators

Information Source	Description	Strategic Limitations
CFRAM Study, Flood Extent Mapping, 2016	Following the undertaking of the PFRA, the OPW, through its engineering consultants and working with local authorities and other stakeholders, conducted extensive engineering assessments to better understand and detail the actual risk from flooding for areas that were at highest levels of risk. This was the subject of public consultation. The outcome of that work includes Predicted Flood Extent maps that were finalised in 2016. For fluvial flood levels, calibration and verification of the models make use of the best available data including hydrometric records, photographs, videos, press articles and anecdotal information.	Spatial spread is limited, including to the areas that are considered to be at most risk of flooding.
OPW Preliminary Flood Risk Assessment (PFRA) Fluvial, Groundwater and Pluvial flood maps, 2012[4]	The OPW PFRA mapping dataset has been arrived at by: • Reviewing records of floods that have happened in the past; • Undertaking analysis to determine which areas might flood in the future, and what the impacts might be; and • Extensive consultation with each local authority and other Government departments and agencies. This assessment has considered all types of flooding, including that which can occur from rivers, the sea and estuaries, heavy rain, groundwater, the failure of infrastructure, and so on. It has also considered the impacts flooding can have on people, property, businesses, the environment and cultural assets. Further information on the purpose and development of the OPW PFRA Maps are available on www.floodinfo.ie. National Coastal Protection Strategy Study flood and coastal erosion risk maps: the predicted flood extents	The PFRA is only a preliminary assessment, based on available or readily derivable information. Analysis has been undertaken to identify areas prone to flooding, and the risks associated with such flooding, but this analysis is purely indicative and undertaken for the purpose of completing the PFRA. The mapping has been developed using simple and cost-effective methods and is based on broad-scale simple analysis and may not be accurate

[4] **Appendix II** of this assessment includes PFRA Fluvial and Coastal mapping. Pluvial and groundwater flood risk is present in the County, however; it is not taken into account in the delineation of flood zones. Nonetheless, it has informed the development of recommendations detailed in Section 4.

Information Source	Description	Strategic Limitations
	that were produced under the Irish Coastal Protection Strategy Study (ICPSS) are based on analysis and modelling. The project included: • Analysis of historic recorded sea levels • Numerical modelling and statistical analysis of combined tide levels and storm surges to estimate extreme water levels along the national coastline for defined probabilities • Calculation of the extent of the predictive flooding, by comparing calculated extreme tide and surge waters levels along the coast with ground level based on a Digital Terrain Model (DTM). These indicative national coastal flood maps are included in the Draft PFRA Maps, provided in a separate volume, for the purposes of consultation on the PFRA.	for a specific location/use.
National Indicative Fluvial Mapping (NIFM) 2021	The OPW NIFM project has produced second generation indicative fluvial flood spatial data that are of a higher quality and accuracy to those produced for the first cycle PFRA. This project has covered 27,000 km of river reaches, separated into 37 drainage areas, consisting of 509 sub-catchments.	Does not cover smaller sized catchments
GSI Groundwater Predictive Modelling	The predictive groundwater flood map presents the probabilistic flood extents for locations of recurrent karst groundwater flooding. It consists of a series of stacked polygons at each site representing the flood extent for specific AEP's mapping floods that are expected to occur every 10, 100 and 1000 years (AEP of 0.1, 0.01, and 0.001 respectively). The map is focussed primarily (but not entirely) on flooding at seasonally inundated wetlands known as turloughs. Sites were chosen for inclusion in the predictive map based on existing turlough databases as well as manual interpretation of SAR imagery. The mapping process tied together the observed and SAR-derived hydrograph data, hydrological modelling, stochastic weather generation and extreme value analysis to generate predictive groundwater flood maps for over 400 qualifying sites. It should be noted that not all turloughs are included in the predictive map as some sites could not be successfully monitored with SAR and/or modelled.	The predictive groundwater flood map do not include all turloughs.

2.5 Conclusion of Stage 1 SFRA

The information detailed above indicates elevated levels of flood risk in various locations across the County; therefore, a Stage 2 SFRA has been proceeded to.

Section 3 Stage 2 SFRA - Flood Risk Assessment

3.1 Introduction

Stage 2 SFRA (flood risk assessment) has been undertaken to:

- Confirm the sources of flooding that may affect zoned and adjacent areas;
- Appraise the adequacy of existing information as identified by the Stage 1 SFRA; and
- Scope the extent of the risk of flooding through the preparation of flood zone maps.

3.2 Findings and Adequacy of Existing Information and Delineation of Flood Zones

Desk and in-field studies were undertaken taking into account the following factors:

- OPW's CFRAMS fluvial flood extent mapping (2016) and other predictive indicators;
- Historical indicators of flood risk;
- Aerial photography;
- Documented Council knowledge of lands;
- Local knowledge;
- The potential source and direction of flood paths from the sea and rivers and streams;
- Vegetation indicative of flood risk; and
- The locations of topographic/built features that coincide with the flood indicator related boundaries/topographical survey.

Within the annual exceedance probabilities specified by the Flood Guidelines for Flood Zones A and B, there are elevated levels of flood risk within the majority of the County's settlements for which land use zoning is included in the Plan, as shown in **Appendix II**.

3.3 Flood Risk Zone Mapping

Flood Risk Zone maps have been produced taking into account the findings of the Stage 1 and Stage 2 SFRA desk and in field studies as identified above[5].

The maps are provided in **Appendix II** and identify Flood Zone A (darker blue) and Flood Zone B[6] (lighter blue). All other areas fall within Flood Zone C. As per the Guidelines, the flood zones in County Leitrim are as follows:

- **Flood Zone A** – where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding);
- **Flood Zone B** – where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% or 1 in 1000 year and 0.5% or 1 in 200 for coastal flooding); and
- **Flood Zone C** – where the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 1000 for both river and coastal flooding). Flood Zone C covers all other areas that are not in zones A or B.

[5] Including taking into account predictive and historical indicators of flood risk, documented Council knowledge of lands, local knowledge, the potential source and direction of flood paths from rivers and streams, vegetation indicative of flood risk and the locations of topographic/built features that coincide with the flood indicator related boundaries/topographical survey.

[6] As identified by the Guidelines, in rivers with a well-defined floodplain or where the coastal plain is well defined at its rear, the limits of Zones A and B will virtually coincide. Zone B will only be significantly different in spatial extent from Zone A where there is extensive land with a gentle gradient away from the river or the sea.

3.4 Sensitivity to Climate Change

'The Planning System and Flood Risk Management Guidelines for Planning Authorities and Technical Appendices, 2009' recommends that a precautionary approach to climate change is adopted due to the level of uncertainty involved in the potential effects. In this regard, the Guidelines recommends:

- Recognising that significant changes in the flood extent may result from an increase in rainfall or tide events and accordingly adopting a cautious approach to zoning land in these potential transitional areas;
- Ensuring that the levels of structures designed to protect against flooding such as flood defences[7], land raising or raised floor levels are sufficient to cope with the effects of climate change over the lifetime of the development they are designed to protect (normally 85-100 years); and
- Ensuring that structures to protect against flooding and the development protected are capable of adaptation to the effects of climate change when there is more certainty about the effects and still time for such adaptation to be effective.

Advice on the expected impacts of climate change and the allowances to be provided for future flood risk management in Ireland is given in the OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (2009). Two climate change scenarios are considered. These are the Mid-Range Future Scenario (MRFS) and the High-End Future Scenario (HEFS). The MRFS is intended to represent a "likely" future scenario based on the wide range of future predictions available. The HEFS represents a more "extreme" future scenario at the upper boundaries of future projections. Based on these two scenarios the OPW recommended allowances for climate change in relation to river flows and sea levels are given in Table 6. These climate change allowances are particularly important at the development management stage of planning, and will ensure that proposed development is designed and constructed to take into account best current knowledge. Climate change allowances have been integrated into the recommendations provided at Section 4 of this report and MRFS and HEFS mapping is available from the OPW for certain areas, including AFAs, and provided in **Appendix II** to this SFRA report.

Table 6 Allowances for Future Scenarios (100-Year Time Horizon)[8]

Criteria	MRFS – to be considered for most development scenarios	HEFS – to be considered in relation to high value, high vulnerability development which cannot be relocated
Extreme Rainfall Depths	+20%	+30%
Flood Flows	+20%	+30%
Mean Sea Level Rise	+500mm	+1000mm

The CFRAM Programme include maps for two potential future scenarios taking account of different degrees of climate impact, the Mid-Range Future Scenario (more likely to occur over the coming decades) and the High-Range Future Scenario (less likely to occur over the coming decades). In compliance with the Guidelines, the Flood Zones identified by the SFRA are defined on the basis of current flood risk. The CFRAMS potential future scenarios mapping and the potential impacts of climate change, including increased rainfall intensities and increased fluvial flood flows, are required to be further taken into account at lower tiers of decision making concerning individual projects.

Flood Risk Assessments shall apply the precautionary approach recommended in the Guidelines and shall be informed by the advice on the expected impacts of climate change and the allowances to be provided for future flood risk management provided in the OPW's (2019) Flood Risk Management Climate Change Sectoral Adaptation Plan and the guidance on potential future scenarios contained therein.

[7] Defended areas are highly sensitive to climate change as the likelihood of defence failure and resulting flooding increases.
[8] OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (2009)

3.5 Sustainable Urban Drainage Systems and Sustainable Surface Water Management Guidance and Strategy

The Plan includes a variety of provisions relating to Storm Water Management:

Storm Water Management Policies

- SWM POL 1 To implement Sustainable Urban Drainage Systems (SuDS) in developments to encourage a more sustainable approach to storm water management.
- SWM POL 2 To resist the discharge of additional surface water to combined sewers and promote Sustainable Urban Drainage Systems (SuDs) and solutions to maximise the capacity of towns with combined drainage systems, where practicable.
- SWM POL 3 To require that new developments are adequately serviced with surface water drainage infrastructure which meets the requirements of the Water Framework Directive, associated River Basin Management Plans and CFRAM Management Plans.
- SWM POL 4 To limit the rate of surface water run off to pre development levels for all green-field developments.
- SWM POL 5 In the case of one-off rural dwellings, surface water shall be disposed of, in its entirety within the curtilage of the development site by way of suitably sized soak holes.

Storm Water Management Objectives

- SWM OBJ 1 To require the use of SuDS to minimise and limit the extent of hard surfacing and paving and require the use of sustainable drainage techniques where appropriate, for new development or for extensions to existing developments, in order to reduce the potential impact of existing and predicted flooding risks.
- SWM OBJ 2 To encourage the use of Green Roof technology particularly on apartment, commercial, leisure and educational buildings.

It is likely that some or all of the following SuDS techniques will be applicable to key development/opportunity sites within the County, including to manage surface water run-off:

- Rainwater harvesting
- Green roofs
- Infiltration systems
- Proprietary treatment systems
- Filter strips
- Filter drains
- Swales
- Bioretention systems
- Trees
- Pervious pavements
- Attenuation storage tanks
- Detention basins
- Ponds and wetlands

The Plan provides for high-level, strategic land use zoning objectives at potential future development sites within settlements through the County. Each zoning objective allows for a range of possible uses and as the Plan allows for a range of scales, heights, densities configurations/layouts and designs. Further to these zoned sites, key development has the potential to occur anywhere else within the County under the Plan. The application of different SuDS techniques will be dependent on a combination of the site's characteristics and the development (when known) being considered.

Because of the infinite range of land use types and associated developments and designs that could occur at zoned and unzoned sites under this type of Plan[9], the guidance from this SFRA is to consider the full range of SUDs available, taking into account the recommendations and information provided above and below. On key development/opportunity sites integrated and area-based provision of SuDS

[9] Refer to Plan "Table 3: Land Use Zoning Matrix" for example for the wide range of land uses possible under sites zoned with single land use zoning objectives.

and green infrastructure may be appropriate in order to avoid reliance on individual site by site solutions.

Some sites in County Leitrim, such as those for which guidance is provided for below, will pose particular challenges for SuDS. The best practice manuals cited at the end of this sub-section should be considered in determining solutions at these and other development sites.

At sites with high groundwater levels:

- Infiltration techniques may be particularly challenging and shallow infiltration basins or permeable pavements, may be most appropriate.
- Storage and conveyance systems need to be kept above maximum groundwater levels and membranes of appropriate robustness should be used to line any tanks
- Locating storage tanks or lined sub-base systems below the maximum likely groundwater level can cause result in flotation and structural risks

At sites that are steeply sloping:

- Effective utilisation of SuDS storage capacity should be considered, which can benefit from aligning with contours of roads and other structures, where these sites are terraced. Terraced car-parking areas can allow for storage of water through pervious pavements. Basins on terraces can provide open space. The runoff catchment on these sites can also be divided into smaller sub catchments.
- Velocities in swales and basins due to the steep slope can be managed by using check dams in swales or in storage layers, such as below permeable pavements.
- The possibility of infiltrating water resurfacing downslope or to increase pressure on downslope structures, such as walls, causing them to fail should be considered.

At sites that are very flat:

- On very flat sites, it is often not possible to construct piped drainage systems with sufficient falls to achieve minimum self-cleansing velocities. The solution can involve the use of shallow SuDS components such as swales, pervious pavements or high capacity linear drainage channels, often dividing the site into small sub-catchments and providing local combined storage and conveyance components.
- A slight fall on any subgrade exposed to water is preferred in order to avoid ponding of water and reduction in strength in the soil due to waterlogging. If this is not possible then reduction in strength should be taken into account in the structural design of tanks or pervious pavements.
- Pumping should be a last resort and only allowable in situations where guaranteed maintenance of the pumps can be ensured.

At sites that include areas of floodplain:

- Notwithstanding that all storage volume should normally be provided within the development footprint, outside of the floodplain, SuDs on floodplains can be effective in managing routine rainfall/treatment for frequent events.
- SuDs should be selected and designed taking account of the likely high groundwater table and vulnerability to erosion during periods of high flows/water levels and SuDS should not reduce floodplain storage or conveyance.
- Conveyance routes should limit grading and the creation of surface features that could either reduce floodplain capacity or be washed out in a flood.
- Surface discharge from SuDS should be dispersed with point discharges minimised or eliminated.
- All SuDS within or crossing a floodplain should take full consideration of the likely influence of river water levels on the design performance. Combined probability assessments may be required.
- Siltation and subsequent clearance after a flood event has subsided should also be taken into account in the design.

SuDS are effective technologies, which aim to reduce flood risk, improve water quality and enhance biodiversity and amenity.

The systems should aim to mimic the natural drainage of the application site to minimise the effect of a development on flooding and pollution of existing waterways. SuDS include devices such as swales, permeable pavements, filter drains, storage ponds, constructed wetlands, soakways and green roofs. The integration of nature based solutions, such as amenity areas, ecological corridors and attenuation ponds, into public and private development initiatives, is applicable within the provisions of the Plan and should be encouraged.

In some exceptional cases, and at the discretion of the Council, where it is demonstrated that SuDS devices are not feasible, approval may be given to install underground attenuation tanks or enlarged pipes in conjunction with other devices to achieve the required water quality. Such alternative measures will only be considered as a last resort. Proposals for surface water attenuation systems should include maintenance proposals and procedures.

Urban developments, both within developments and within the public realm, should seek to minimise and limit the extent of hard surfacing and paving and require the use of sustainable drainage techniques for new development or for extensions to existing developments, in order to reduce the potential impact of existing and predicted flood risk. Development proposals should be accompanied by a comprehensive SuDS assessment that addresses run-off rate, run-off quality and its impact on the existing habitat and water quality.

For larger sites (i.e. multiple dwellings or commercial units) master planning should ensure that existing flow routes are maintained, through the use of green infrastructure. In addition, where multiple individual proposals are being made SUDS should be integrated where appropriate and relevant.

All proposed development, should consider the impact of surface water flood risks on drainage design e.g. in the form of a section within the flood risk assessment (for sites in Flood Zone A or B) or part of a surface water management plan.

Areas vulnerable to ponding are indicated on the OPW's PFRA Pluvial mapping. Particular attention should be given to development in low-lying areas which may act as natural ponds for collection of run-off. The drainage design should ensure no increase in flood risk to the site, or the downstream catchment. Where possible, and particularly in areas of new development, floor levels should at an appropriate height above adjacent roads and hard standing areas to reduce the consequences of any localised flooding. Where this is not possible, an alternative design appropriate to the location may be prepared.

Proposals for development should consider the Construction Industry Research and Information Association (CIRIA) SuDS Manual 2015 and any future update of this guidance and Greater Dublin Strategic Drainage Study documents in designing SUDS solutions, including the New Development Policy, the Final Strategy Report, the Code of Practice and “Irish SuDS: guidance on applying the GDSDS surface water drainage criteria”.

Section 4 Recommendations

4.1 Introduction

In order to comply with *The Planning System and Flood Risk Management - Guidelines for Planning Authorities* (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009) and Department of the Environment, Community and Local Government Circular (*PL 2/2014*) and contribute towards flood risk management within the Plan area, the recommendations below have been made by the SFRA process and integrated into the Plan.

4.2 Integration of written provisions relating to flood risk management into the Plan

The written provisions relating to flood risk management detailed on Table 7, have been integrated into the Plan.

Various provisions have been integrated into the text of the Plan over multiple iterations through the Plan-preparation and SEA/SFRA process. The Council sought to ensure that: provisions integrated into the Plan were as non-technical in so far as practical and as concise as possible; no provisions within the Plan replicated those already set out in higher tier policy or legislation that any new development under the Plan would have to comply with in any case.

Table 7 Flood Risk Management Provisions from the Plan, including:

Reference from the Plan	Summary of Provision	Provision
Chapter 2 Core Strategy Strategic Aim 13.	Climate adaption - flood resilience	To support, in principle, development that addresses climate change in terms of adaptation and mitigation measures including increasing flood resilience, the promotion of sustainable transport options and the development of renewable energy technologies where possible to achieve a successful transition to a low carbon economy.
Chapter 2 Core Strategy Overarching Core Strategy Objectives CS OBJ 19	Climate action including that related to the increased risk of flooding	To ensure that development is promoted, supported or facilitated through the County Development Plan that provides for climate action including that related to the increased risk of flooding and the promotion of sustainable transport options and renewable energy where possible to achieve a successful transition to a low carbon economy.
Chapter 6 Urban Settlements Land Use Zoning Objectives	Land Use Zoning Objectives: Constrained Land Use	To ensure the appropriate management and sustainable use of flood risk areas designated as 'Constrained Land Use' on Settlement Plans"
Chapter 6 Urban Settlements Land Use Zoning Objectives **Land Use Zoning Matrix**	Land Use Zoning Matrix: Constrained Land Use	**Constrained Land Use** The Planning Authority has not included Constrained Land Use within the Zoning Matrix as sufficient guidance has been provided in section 4.3.1. A couple of footnotes have been included in the Zoning Matrix which should also be consulted.
		Note With regard to the consideration of uses within lands identified with a Tourism, Open Space or Agricultural land use zoning objective which are also subject to the Constrained Land Use Objective, permissible uses shall be constrained to those water compatible and less vulnerable uses as relevant to the particular Flood Zone.
		LAND USE POL 4 The approach to Constrained Land Use described under the Constrained Land Use objective shall be complied with by proposals for development in zoned areas where flood risk presents constraints to prospective land uses.
Chapter 6 Urban Settlements Land Use Zoning	**Note on Table 6.1 and 6.2**	Note A - Only water compatible tourism use will be considered on undeveloped lands in Flood Zone A.
Chapter 9 Infrastructure and Energy Flood Risk Management Policy FRM POL 1	Risk-based planning approach to flood management	To adopt a comprehensive risk-based planning approach to flood management to prevent or minimise future flood risk. In accordance with the Planning System and Flood Risk Management – Guidelines for Planning Authorities, the avoidance of development in areas where flood risk has been identified shall be the primary response.
Chapter 9 Infrastructure and Energy	Ensure that a flood risk assessment is carried out	To ensure that a flood risk assessment is carried out for any development proposal, in accordance with the Planning System and Flood Risk Management (DoEHLG/OPW 2009) and Circular PL2/2014. This assessment shall be appropriate to the scale and nature of risk to the potential development.

Reference from the Plan	Summary of Provision	Provision
Flood Risk Management Policy FRM POL 2		
Chapter 9 Infrastructure and Energy Flood Risk Management Policy FRM POL 3	Sustainable management and uses of water bodies and drainage channels	To consult with the OPW in relation to proposed developments in the vicinity of drainage channels and rivers for which the OPW are responsible, and to retain a strip on either side of such channels where required, to facilitate maintenance access thereto. In addition, to promote the sustainable management and uses of water bodies and avoid culverting or realignment of these features.
Chapter 9 Infrastructure and Energy Flood Risk Management Policy FRM POL 4	County's floodplains and wetlands	To protect and enhance the County's floodplains and wetlands as 'green infrastructure' which provides space for storage and conveyance of floodwater, enabling flood risk to be more effectively managed and reducing the need to provide flood defences in the future, subject to normal planning and environmental criteria.
Chapter 9 Infrastructure and Energy Flood Risk Management Policy FRM POL 5	Flood risk management infrastructure	To protect the integrity of any formal flood risk management infrastructure, thereby ensuring that any new development does not negatively impact any existing defence infrastructure or compromise any proposed new defence infrastructure.
Chapter 9 Infrastructure and Energy Flood Risk Management Policy FRM POL 6	Flood risk management works	To ensure that where flood risk management works take place that the natural, cultural and built heritage, rivers, streams and watercourses are protected and enhanced to the maximum extent possible.
Chapter 9 Infrastructure and Energy Flood Risk Management Policy FRM POL 7	Flood risk management activity	To ensure each flood risk management activity is examined to determine actions required to embed and provide for effective climate change adaptation as set out in the OPW Climate Change Sectoral Adaptation Plan Flood Risk Management applicable at the time.
Chapter 9 Infrastructure and Energy Flood Risk Management Policy FRM POL 8	Consultation with relevant agencies	To consult, where necessary, with Inland Fisheries Ireland, the National Parks and Wildlife Service and other relevant agencies in the provision of flood alleviation measures in the County.

Reference from the Plan	Summary of Provision	Provision
Chapter 9 Infrastructure and Energy Flood Risk Management Policy FRM POL 9	Impact on the quality of surface waters	To ensure that in assessing applications for developments, that consideration is had to the impact on the quality of surface waters having regard to targets and measures set out in the River Basin Management Plan for Ireland 2018-2021 and any subsequent local or regional plans.
Chapter 9 Infrastructure and Energy Flood Risk Management Policy FRM POL 10	Development Management Justification Test	Development proposals will need to be accompanied by a Development Management Justification Test when required by the Guidelines. Where only a small proportion of a site is at risk of flooding, the sequential approach shall be applied in site planning, in order to seek to ensure that no encroachment onto or loss of the flood plain occurs and/or that only water compatible development such as 'Open Space' would be permitted for the lands which are identified as being at risk of flooding within that site.
Chapter 9 Infrastructure and Energy Flood Risk Management Policy FRM POL 11	Compliance with requirements of the Planning System and Flood Risk Assessment Guidelines; structural and non-structural flood risk management measures	To require proposals for development to comply with requirements of the Planning System and Flood Risk Assessment Guidelines including providing detailed design specifications as may be required to facilitate the impact of development. a) Extensions of existing uses or minor development within flood risk areas shall not: obstruct important flow paths; introduce a number of people into flood risk areas; entail the storage of hazardous substances; have adverse impacts or impede access to a watercourse, floodplain or flood protection and management facilities; or increase the risk of flooding elsewhere. b) Applications for development within Flood Zones A or B, and on lands subject to the mid-range future scenario floods extents, as published by the Office of Public Works, shall be subject to site specific flood risk assessment. Such assessments shall consider climate change impacts and adaptation measures and shall provide details of structural and non-structural flood risk management measures, to include, but not be limited to specifications of the following: **Floor Levels** In areas of limited flood depth, the specification of the threshold and floor levels of new structures shall be raised above expected flood levels to reduce the risk of flood losses to a building, by raising floor heights within the building structure using a suspended floor arrangement or raised internal concrete platforms. When designing an extension or modification to an existing building, an appropriate flood risk reduction measure shall be specified to ensure the threshold levels into the building are above the design flood level. However, care must also be taken to ensure access for all is provided in compliance with Part M of the Building Regulations. Where threshold levels cannot be raised to the street for streetscape, conservation or other reasons, the design shall specify a mixing of uses vertically in buildings - with less vulnerable uses located at ground floor level, along with other measures for dealing with residual flood risk. **Internal Layout** Internal layout of internal space shall be designed and specified to reduce the impact of flooding [for example, living accommodation, essential services, storage space for provisions and equipment shall be designed to be located above the predicted flood level]. In addition, designs and specifications shall ensure that, wherever reasonably practicable, the siting of living accommodation (particularly sleeping areas) shall be above flood level.

Reference from the Plan	Summary of Provision	Provision
		With the exception of single storey extensions to existing properties, new single storey accommodation shall not be deemed appropriate where predicted flood levels are above design floor levels. In all cases, specifications for safe access, refuge and evacuation shall be incorporated into the design of the development. **Flood-Resistant Construction** Developments in flood vulnerable zones shall specify the use of flood-resistant construction aimed at preventing water from entering buildings - to mitigate the damage floodwater caused to buildings. Developments shall specify the use of flood resistant construction prepared using specialist technical input to the design and specification of the external building envelope – with measures to resist hydrostatic pressure (commonly referred to as “tanking”) specified for the outside of the building fabric. The design of the flood resistant construction shall specify the need to protect the main entry points for floodwater into buildings - including doors and windows (including gaps in sealant around frames), vents, air-bricks and gaps around conduits or pipes passing through external building fabric. The design of the flood resistant construction shall also specify the need to protect against flood water entry through sanitary appliances as a result of backflow through the drainage system. **Flood-Resilient Construction** Developments in flood vulnerable zones that are at risk of occasional inundation shall incorporate design and specification for flood resilient construction which accepts that floodwater will enter buildings and provides for this in the design and specification of internal building services and finishes. These measures limit damage caused by floodwater and allow relatively quick recovery. This can be achieved by specifying wall and floor materials such as ceramic tiling that can be cleaned and dried relatively easily, provided that the substrate materials (e.g. blockwork) are also resilient. Electrics, appliances and kitchen fittings shall also be specified to be raised above floor level, and one-way valves shall be incorporated into drainage pipes. **Emergency Response Planning** In addition to considering physical design issues for developments in flood vulnerable zones, the developer shall specify that the planning of new development also takes account of the need for effective emergency response planning for flood events in areas of new development. Applications for developments in flood vulnerable zones shall provide details that the following measures will be put in place and maintained: • Provision of flood warnings, evacuation plans and ensuring public awareness of flood risks to people where they live and work; • Coordination of responses and discussion with relevant emergency services i.e. Local Authorities, Fire and Rescue, Civil Defence and An Garda Siochána through the SFRA; and • Awareness of risks and evacuation procedures and the need for family flood plans. **Access and Egress During Flood Events** Applications for developments in flood vulnerable zones shall include details of arrangements for access and egress during flood events. Such details shall specify that: • flood escape routes have been kept to publicly accessible land; • such routes will have signage and other flood awareness measures in place, to inform local communities what to do in case of flooding; • this information will be provided in a welcome pack to new occupants.

Reference from the Plan	Summary of Provision	Provision
		Further Information Further and more detailed guidance and advice can be found at http://www.flooding.ie and in the Building Regulations. c) In Flood Zone C, where the probability of flooding is low (less than 0.1%, Flood Zone C), site-specific Flood Risk Assessment may be required and the developer should satisfy themselves that the probability of flooding is appropriate to the development being proposed. The County Development Plan SFRA datasets and the most up to date information on flood risk, including that relating to climate scenarios, should be consulted by prospective applicants for developments in this regard and will be made available to lower-tier Development Management processes in the Council.
Chapter 9 Infrastructure and Energy Flood Risk Management Policy FRM POL 12	Flood Risk Assessments and climate change	To require that Strategic Flood Risk Assessments and site-specific Flood Risk Assessments shall provide information on the implications of climate change with regard to flood risk in relevant locations. The 2009 OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (or any superseding document) and the Flood Risk Management – Climate Change Sectoral Adaptation Plan 2019, and the guidance on potential future scenarios contained therein, shall be consulted with to this effect.
Chapter 9 Infrastructure and Energy Flood Risk Management Policy FRM POL 13	Site-specific Flood Risk Assessments - Flood Zones A/B and mid-range future climate scenario	To require the submission of site-specific Flood Risk Assessments for developments undertaken within Flood Zones A & B and on lands subject to the mid-range future scenario floods extents, as published by the Office of Public Works. These Flood Risk Assessments shall consider climate change impacts and adaptation measures including details of structural and non-structural flood risk management measures, such as those relating to floor levels, internal layout, flood-resistant construction, flood-resilient construction, emergency response planning and access and egress during flood events.
Chapter 9 Infrastructure and Energy Flood Risk Management Policy FRM POL 14	Site-specific Flood Risk Assessments – benefitting lands	To require the undertaking of site-specific flood risk assessments for applications for development on land identified as benefitting land which may be prone to flooding
Chapter 9 Infrastructure and Energy Flood Risk Management Policy FRM POL 15	New developments proposed in Arterial Drainage Schemes and Drainage Districts	To ensure that new developments proposed in Arterial Drainage Schemes and Drainage Districts do not result in a significant negative impact on the integrity, function and management of these areas.

Reference from the Plan	Summary of Provision	Provision
Chapter 9 Infrastructure and Energy Flood Risk Management Policy FRM POL 16	New and/or emerging data	Any potential future variations to and review of the Plan shall consider, as appropriate any new and/or emerging data relating to flood risk.
Chapter 9 Infrastructure and Energy Flood Risk Management Objective FRM OBJ 1	Recommendations of the SFRA	To implement and comply fully with the recommendations of the Strategic Flood Risk Assessment prepared as part of the Leitrim County Development Plan 2023-2029.
Chapter 9 Infrastructure and Energy Flood Risk Management Objective FRM OBJ 2	Recommendations contained in the Flood Risk Management Plans	To implement in conjunction with the Office of Public Works the recommendations contained in the Flood Risk Management Plans (FRMP's), including planned investment measures for managing and reducing flood risk, subject to obtaining the necessary planning consent and undertaking the required environmental assessments
Chapter 11 Heritage Wetlands Policy WET POL 3	Riparian setback	To ensure that all proposed land zonings take cognisance of appropriate riparian setback distances that support the attainment of high ecological status for water bodies, the conservation of biodiversity and good ecosystem health, and buffer zones from flood plains.
Chapter 12 Climate Action and Renewable Energy Nature-Based Approaches and Green Infrastructure – Policy NBGI POL 1	Nature-based approaches and green infrastructure solutions to assist in flood risk management	To actively promote and encourage nature-based approaches and green infrastructure solutions as viable mitigation and adaptation measures to reduce GHG emissions, increase the adaptive capacity of ecosystems and optimise the multifaceted benefits through: • Conservation, promotion, and restoration of the natural environment; • Integrating an ecosystem services approach and promote healthy living environments through enhanced connection with nature and recreation/amenity; • Enhancing biodiversity in urban and rural settings; • Assist with water and flood risk management; and • Carbon storage or sequestration.
Volume II Settlement Plans	Permissible uses	Ballinamore Permissible uses for undeveloped lands within Flood Zones A and B that are zoned Tourism Related Development in this settlement shall be constrained to those 'water compatible' and 'less vulnerable' uses as appropriate to the particular Flood Zone (please refer to the Flood Risk Management provisions in Volume I of the Draft Plan and to the accompanying Strategic Flood Risk Assessment (SFRA). Dromahair Permissible uses for undeveloped lands within Flood Zones A and B that are zoned Tourism Related Development in this settlement shall be constrained to those 'water compatible' and 'less vulnerable' uses as appropriate to the particular Flood Zone

Reference from the Plan	Summary of Provision	Provision
		(please refer to the Flood Risk Management provisions in Volume I of the Draft Plan and to the accompanying Strategic Flood Risk Assessment (SFRA). Drumshanbo Permissible uses for undeveloped lands within Flood Zones A and B that are zoned Social & Community and Tourism Related Development in this settlement shall be constrained to those 'water compatible' and 'less vulnerable' uses as appropriate to the particular Flood Zone (please refer to the Flood Risk Management provisions in Volume I of the Draft Plan and to the accompanying Strategic Flood Risk Assessment (SFRA). Mohill Permissible uses for undeveloped lands within Flood Zones A and B that are zoned Tourism Related Development in this settlement shall be constrained to those 'water compatible' and 'less vulnerable' uses as appropriate to the particular Flood Zone (please refer to the Flood Risk Management provisions in Volume I of the Draft Plan and to the accompanying Strategic Flood Risk Assessment (SFRA). Dromod Permissible uses for undeveloped lands within Flood Zones A and B that are zoned Tourism Related Development in this settlement shall be constrained to those 'water compatible' and 'less vulnerable' uses as appropriate to the particular Flood Zone (please refer to the Flood Risk Management provisions in Volume I of the Draft Plan and to the accompanying Strategic Flood Risk Assessment (SFRA). Dumsna Permissible uses for undeveloped lands within Flood Zones A or B that are zoned for 'Tourism Related Development' land use in this settlement shall be constrained to those "water compatible" and "less vulnerable" uses as appropriate to the particular Flood Zone (please refer to the flood risk management provisions in Volume I Written Statement and to the accompanying Strategic Flood Risk Assessment). Leitrim Village Permissible uses for undeveloped lands within Flood Zones A or B that are zoned for 'Tourism Related Development' land use in this settlement shall be constrained to those "water compatible" and "less vulnerable" uses as appropriate to the particular Flood Zone (please refer to the flood risk management provisions in Volume I Written Statement and to the accompanying Strategic Flood Risk Assessment). Fenagh Permissible uses for undeveloped lands within Flood Zones A or B identified for 'General Development' in this settlement shall be constrained to those "water compatible" and "less vulnerable" uses as appropriate to the particular Flood Zone (please refer to the flood risk management provisions in Volume I Written Statement and to the accompanying Strategic Flood Risk Assessment). Keshcarrigan Permissible uses for undeveloped lands within Flood Zones A or B identified for 'General Development' in this settlement shall be constrained to those "water compatible" and "less vulnerable" uses as appropriate to the particular Flood Zone (please refer to the flood risk management provisions in Volume I Written Statement and to the accompanying Strategic Flood Risk Assessment).

4.3 Justification Test

The levels of flood risk identified by the SFRA were a key informant of land uses in Flood Zones A and B. The Justification Test is required to be passed whereby *highly vulnerable*[10] land uses are being proposed on lands in Flood Zone A or whereby *highly* and/or *less vulnerable* land uses are being proposed on lands in Flood Zone B. Although Stage 3 detailed flood risk assessment has not been required for the Plan-preparation process thus far, it may be required for individual projects following adoption of the Plan. Table 8 provides justification tests for the Plan as required.

Table 8 Justification Tests for Otherwise Inappropriate Land Use Zoning within Flood Zone A or B

Settlement	**Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)**	**Previously Developed Lands, for these uses or for uses with the same/less vulnerability?**	**Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)**						**Overall Result**
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	**Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied**				**Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?**	
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	**Do the lands comprise significant previously developed and/or under-utilised lands?**	**Are the lands within or adjoining the core of an established or designated urban settlement?**	**Will the zoning be essential in achieving compact and sustainable urban growth?**	**There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.**	
Ballinamore	Social and Community	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.				Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Tourism Related Development	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.				Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

[10] For details on what types of development are considered highly vulnerable, less vulnerable or water compatible please refer to Table 9 in **Appendix I**.

[11] Note that the meaning of the zoning objectives has been influenced by the SFRA process and these meanings are explained in the Plan, including through the land use zoning provisions and the flood risk management provisions repeated in this SFRA report.

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)							
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
	Existing Residential	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Mixed Use	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Town/Village Centre (north of R202)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)						
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied				Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	
	Town/Village Centre (south of R202)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
Carrigallen	Existing Residential	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Mixed Use	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)							
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
Dowra	General	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
Dromahair	Mixed Use	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Tourism	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)							
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
	Town/Village Centre	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
Dromod	Social and Community	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Mixed Use	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)							
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
	Enterprise and Employment	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Utilities	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Existing Residential (north west of Plan area)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)						Overall Result
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied				Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	
	Existing Residential (north east of Plan area)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Existing Residential (Cuan Eislinne)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Existing Residential (beside train station)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)						
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied				Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	
	Existing Residential (River Meadow)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Mixed Use (north east of Plan area)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Mixed Use (south west of Plan area)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)						
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied				Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	
	Tourism Related Development (north east of Plan area)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Tourism Related Development (south west of Plan area)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
Drumkeeran	Utilities	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)							
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
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Drumshanbo	Social and Community	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Mixed Use	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Existing Residential	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)						
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied				Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	
	Town/Village Centre	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
Drumsna	Tourism Related Development (north of L3656)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Tourism Related Development (south of L3656)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)							
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
Fenagh	General	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
Glenfarne	General (Glenfarne - unfinished housing estate)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	General (Glenfarne - elsewhere)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)							
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
	General (in north of Stranagress)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	General (in south of Stranagress)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	General (in centre of Stranagress)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)							
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
Jamestown	Social and Community	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
Keshcarrigan	Tourism Related Development (in north west)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Tourism Related Development (in north east)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)						Overall Result
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied				Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	
	Tourism Related Development (in south)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Utilities	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Social and Community	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)						
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
	General (Beal na Leice/Ceis Lawns)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	General (at and adjacent to An Gairdín)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	General (to south of R209 and east of Crannóg)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)						
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
	General (to south of R209 and west of Crannóg)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
Kiltyclogher	General	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
Kinlough	Existing Residential (in north of settlement)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)							
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
	Existing Residential (in south of settlement)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Utilities	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
Leitrim Village	Existing Residential (Cluain Óir)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)						
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied				Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	
	Tourism Related Development (west of R284)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Tourism Related Development (east of R284)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Mixed Use (west of R284)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)							
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
	Mixed Use (east of R284, south of Church View)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Mixed Use (east of R284, north of Riversdale)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Social and Community	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

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			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied				Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	
	Existing Residential (Leitrim Marina)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Existing Residential (to immediate south east of Leitrim Marina)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Existing Residential (south of Mixed Use, west of R284)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)						Overall Result
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied				Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	
	Existing Residential (Cois Abhainne)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Town/Village Centre (to the north of the canal)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Town/Village Centre (to the south of the canal)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)							
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
Manorhamilton	Social and Community (east of R280)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Social and Community (west of R280)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Enterprise and Employment	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)							
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
	Mixed Use (between R280 and R282)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Mixed Use (co-op/ Teagasc)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Mixed Use (between R280 and N16)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)						
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied				Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	
	Mixed Use (to south of N16 at CloneenPark)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Utilities	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Existing Residential (between R280 and R282)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)						
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied				Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	
	Existing Residential (to north of Teagasc)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Existing Residential (to south of N16 and Teagasc)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
Mohill	Existing Residential (along Water Street; east of O'Carolan Ct)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)						Overall Result
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied				Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	
	Mixed Use (centre of town, west of Station Road)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.				Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Social and Community (north of town)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.				Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Social and Community (south of town)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.				Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)							
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
	Existing Residential (south of town)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Utilities	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	Tourism Rleated Development	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

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			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
	Enterprise and Employment	Yes		This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
Newtowngore	Utilities	Yes		This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	General	Yes		This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)							
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
Roosky	General (most northerly overlap)	Yes		This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	General (Beeches)	Yes		This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	General (to west of R371, along River Shannon)	Yes		This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Settlement	Zoning in Plan[11] (for intersects, refer to the maps in Appendix III)	Previously Developed Lands, for these uses or for uses with the same/less vulnerability?	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)						
			Is the settlement targeted for growth under the RSES, existing CDP and/or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria must be satisfied					Has an FRA to an appropriate level of detail been carried out as part of the SEA as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere?	Overall Result
				Is it essential to facilitate regeneration and/or expansion of the centre of the urban settlement?	Do the lands comprise significant previously developed and/or under-utilised lands?	Are the lands within or adjoining the core of an established or designated urban settlement?	Will the zoning be essential in achieving compact and sustainable urban growth?	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.		
	General (Roosky Lock, Shannon Quays)	Yes		This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
Rossinver	General (north of Plan area)	Yes		This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass
	General (around R281/R282 junction)	Yes	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.					Yes. Future development will: be subject to site-specific flood risk assessments; and comply with the flood risk management provisions of the Plan (see Section 4 above), including structural and non-structural risk management measures. This is in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced.	Pass

Section 5 Conclusion

Stage 2 SFRA has been undertaken as part of the Plan-preparation process and the SFRA has informed the preparation of the Plan.

The SFRA has mapped boundaries for Flood Risk Zones, taking into account factors including: predictive and historical indicators of flood risk; documented Council knowledge of lands; local knowledge; the potential source and direction of flood paths from rivers, streams and the sea; vegetation indicative of flood risk; and the locations of topographic/built features that coincide with the flood indicator related boundaries/topographical survey.

All SFRA recommendations have been integrated into the Plan and the Plan complies with the Guidelines and associated Circular.

Appendix I: Summary of the requirements of the Flood Guidelines for land uses in Flood Zones

Requirements relating to land uses in Flood Zones as set out in the Department of Environment, Heritage and Local Government (DEHLG) and Office of Public Works (OPW) 2009 Flood Guidelines (including at Chapter 3 Principles and Key Mechanisms and Chapter 5 Flooding and Development Management) and Departmental Circular PL2/2014 should be adhered to.

- The Sequential Approach, including the Justification test -

The key principles of the Guidelines' risk-based sequential approach (see Figure 1) are:

- Avoid development in areas at risk of flooding. If this is not possible, consider substituting a land use that is less vulnerable to flooding. Only when both avoidance and substitution cannot take place should consideration be given to mitigation and management of risks.
- Inappropriate types of development that would create unacceptable risks from flooding should not be planned for or permitted.
- Exceptions to the restriction of development due to potential flood risks are provided for through the use of a Justification Test, where the planning need and the sustainable management of flood risk to an acceptable level must be demonstrated.

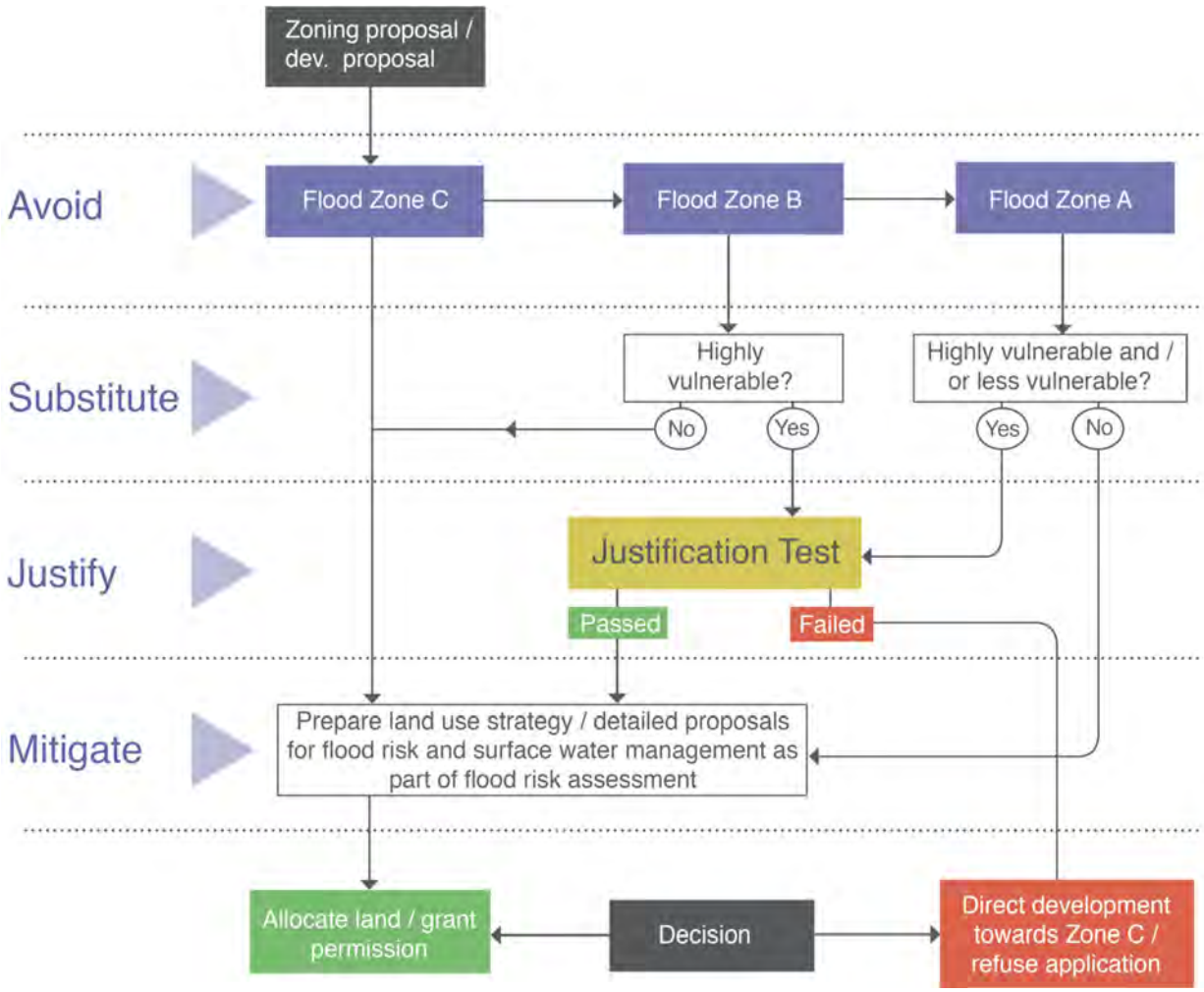

Figure 1 Sequential Approach Process[12]

[12] Flood Zone C covers all areas outside of Zones A and B

In summary, the **planning implications** for each of the flood zones are:

Zone A - High probability of flooding. Most types of development would be considered inappropriate in this zone. Development in this zone should be avoided and/or only considered in exceptional circumstances, such as in city and town centres, or in the case of essential infrastructure that cannot be located elsewhere, and where the Justification Test has been applied. Only water-compatible development, such as docks and marinas, dockside activities that require a waterside location, amenity open space, outdoor sports and recreation, would be considered appropriate in this zone.

Zone B - Moderate probability of flooding. Highly vulnerable development, such as hospitals, residential care homes, Garda, fire and ambulance stations, dwelling houses and primary strategic transport and utilities infrastructure, would generally be considered inappropriate in this zone, unless the requirements of the Justification Test can be met. Less vulnerable development, such as retail, commercial and industrial uses, sites used for short-let for caravans and camping and secondary strategic transport and utilities infrastructure, and water-compatible development might be considered appropriate in this zone. In general however, less vulnerable development should only be considered in this zone if adequate lands or sites are not available in Zone C and subject to a flood risk assessment to the appropriate level of detail to demonstrate that flood risk to and from the development can or will adequately be managed.

Zone C - Low probability of flooding. Development in this zone is appropriate from a flood risk perspective (subject to assessment of flood hazard from sources other than rivers and the coast) but would need to meet the normal range of other proper planning and sustainable development considerations.

Table 9 overleaf classifies the vulnerability of different types of development while Table 10 identifies the appropriateness of development belonging to each vulnerability class within each of the flood zones as well as identifying what instances in which the Justification Test should be undertaken. Inappropriate development that does not meet the criteria of the Justification Test should not be considered at the plan-making stage or approved within the development management process.

Table 9 Classification of vulnerability of different types of development

Vulnerability class	Land uses and types of development which include*:
Highly vulnerable development (including essential infrastructure)	Garda, ambulance and fire stations and command centres required to be operational during flooding; Hospitals; Emergency access and egress points; Schools; Dwelling houses, student halls of residence and hostels; Residential institutions such as residential care homes, children's homes and social services homes; Caravans and mobile home parks; Dwelling houses designed, constructed or adapted for the elderly or, other people with impaired mobility; and Essential infrastructure, such as primary transport and utilities distribution, including electricity generating power stations and sub-stations, water and sewage treatment, and potential significant sources of pollution (SEVESO sites, IPPC sites, etc.) in the event of flooding.
Less vulnerable development	Buildings used for: retail, leisure, warehousing, commercial, industrial and non-residential institutions; Land and buildings used for holiday or short-let caravans and camping, subject to specific warning and evacuation plans; Land and buildings used for agriculture and forestry; Waste treatment (except landfill and hazardous waste); Mineral working and processing; and Local transport infrastructure.
Water-compatible development	Flood control infrastructure; Docks, marinas and wharves; Navigation facilities; Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location; Water-based recreation and tourism (excluding sleeping accommodation); Lifeguard and coastguard stations; Amenity open space, outdoor sports and recreation and essential facilities such as changing rooms; and Essential ancillary sleeping or residential accommodation for staff required by uses in this category (subject to a specific warning and evacuation plan).

*Uses not listed here should be considered on their own merits

Table 10 Vulnerability Classes and Flood Zones

	Flood Zone A	Flood Zone B	Flood Zone C
Highly vulnerable development (including essential infrastructure)	Justification Test	Justification Test	Appropriate
Less vulnerable development	Justification Test	Appropriate	Appropriate
Water-compatible development	Appropriate	Appropriate	Appropriate

The **Justification Test** that is referred to as part of the Sequential Approach is an assessment of whether a development proposal within an area at risk of flooding meets specific criteria for proper planning and sustainable development and demonstrates that it will not be subject to unacceptable risk nor increase flood risk elsewhere. The Test should be applied only where development is within flood risk areas that would be defined as inappropriate under the screening test of the sequential risk based approach outlined above. This Test is shown below - taken as an excerpt from the Guidelines document - the references (Table 3.2 and Section 4.27b in the footnote) are references to parts of the Guidelines document.

Where, as part of the preparation and adoption or variation and amendment of a development/local area plan[1], a planning authority is considering the future development of areas in an urban settlement that are at moderate or high risk of flooding, for uses or development vulnerable to flooding that would generally be inappropriate as set out in Table 3.2, all of the following criteria must be satisfied:

1 The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act, 2000, as amended.

2 The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and, in particular:

(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement[2];

(ii) Comprises significant previously developed and/or under-utilised lands;

(iii) Is within or adjoining the core[3] of an established or designated urban settlement;

(iv) Will be essential in achieving compact and sustainable urban growth; and

(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.[4]

3 A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.

N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment.

Figure 2 Justification Test [13]

[13] Footnotes: [1] Including Strategic Development Zones and Section 25 Schemes in the area of the Dublin Docklands Development Authority [2]In the case of Gateway planning authorities, where a number of strategic growth centres have been identified within the overall area of the authority, the Justification Test may be applied for vulnerable development within each centre. [3] See definition of the core of an urban settlement in Glossary of Terms. [4] This criterion may be set aside where section 4.27b applies.

Leitrim County Development Plan 2023-2029

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